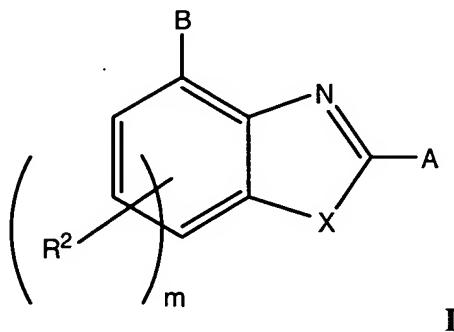


Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the above-captioned application.

Please cancel claims 12-31 and 39-58 without prejudice.

1. A chemical compound of general structure I:



I

wherein A is a cyclic ring;

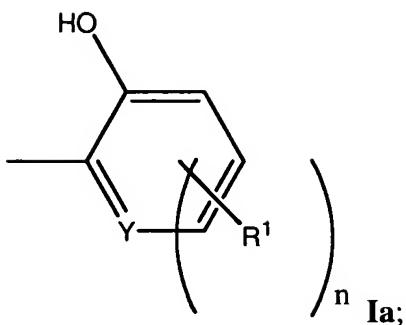
wherein B comprises a metal binding substituent;

wherein each R² is independently hydrogen, halogen, alkyl, cyano, alkoxy, carboalkoxy, haloalkyl, or alkylamino;

wherein m is 1 to 3; and

wherein X is NR³, O, or S, wherein R³ is hydrogen, alkyl, halo, haloalkyl, alkoxy, CO₂R⁵, COR⁵, or aryl, and wherein R⁵ is hydrogen, alkyl, amino acid, or peptide.

2. (Original) The compound of claim 1, wherein A is a structure of the form Ia:

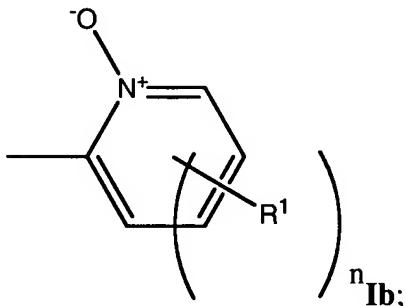


wherein Y is CH, CR¹, or N;

wherein n is 1 to 3; and

wherein each R¹ is independently H, alkyl, halo, haloalkyl, alkoxy, arylalkyl, or alkylamino, and wherein R¹ is positioned on any carbon ortho, meta, or para to the -OH group.

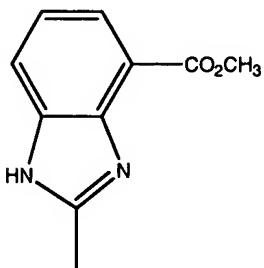
3. (Original) The compound of claim 1, wherein A is a structure of the form Ib:



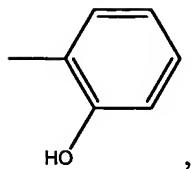
wherein n is 1 to 4; and

wherein each R¹ is independently H, alkyl, halo, haloalkyl, alkoxy, or alkylamino.

4. (Original) The compound of claim 1, wherein B is

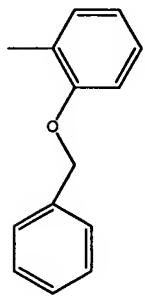


wherein A is



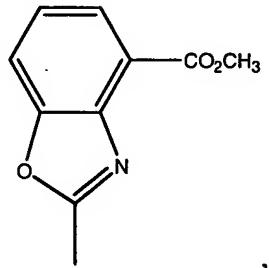
and wherein X is oxygen.

5. (Original) The compound of claim 1, wherein B is CO₂H, wherein A is

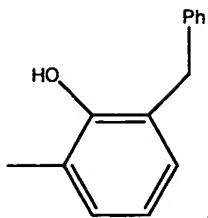


and wherein X is NH.

6. (Original) The compound of claim 1, wherein B is



wherein A is



and wherein X is oxygen.

7. (Original) The compound of claim 1, wherein B is CO_2CH_3 , wherein A is $\text{C}_6\text{H}_5\text{OH}$, and wherein X is oxygen.

8. (Original) The compound of claim 1, wherein the metal binding substituent is configurable to bind magnesium.

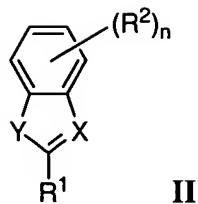
9. (Original) The compound of claim 1, wherein the metal binding substituent is configurable to bind to at least one of nickel, calcium, zinc, or iron.

10. (Original) The compound of claim 1, wherein the metal binding substituent is configurable to bind a metal ion and to allow association of the resulting complex with double-stranded DNA.

11. (Original) The compound of claim 1, wherein the metal binding substituent is configurable to bind a metal ion and to allow the resulting complex to cleave DNA in the presence of an oxidant.

Claims 12-31 (Cancelled)

32. (Original) A method of synthesizing a chemical compound comprising a cyclic ring having the structure II

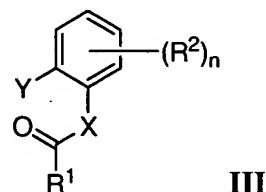


where R^1 and R^2 are independently hydrogen, alkyl, aryl, or halogen;

where n is 1 to 4; and

where X and Y are independently N or O, comprising:

reacting an acyclic compound having the structure III with an acid in a solvent;



where R^1 and R^2 are independently hydrogen, alkyl, aryl, or halogen;

where n is 1 to 4; and

where X and Y are independently N or O;

heating the reaction.

33. (Original) The method of claim 32, wherein the acid is an organic acid.

34. (Original) The method of claim 32, wherein the acid is *p*-TsOH.

35. (Original) The method of claim 32, wherein the solvent is an organic solvent.

36. (Original) The method of claim 32, wherein the solvent is a hydrocarbon.

Sean Kerwin
10/720,991

37. (Original) The method of claim 32, wherein heating the reaction comprises a temperature above 80°C.

38. (Original) The method of claim 32, further comprising cooling the reaction down to at least room temperature and filtering off the acid.

Claims 39-58 (cancelled)

Sean Kerwin
10/720,991

It is believed that no fees are due in connection with the filing of this Preliminary Amendment. However, if any fees are due, the Commissioner is hereby authorized to deduct said fees from Meyertons, Hood, Kivlin, Kowert & Goetzel Deposit Account No. 50-1505/5119-12501/EBM.

Respectfully submitted,



Mark R. DeLuca
Reg. No. 44,649

Patent Agent for Applicant

MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.
P.O. BOX 398
AUSTIN, TX 78767-0398
(512) 853-8800 (voice)
(512) 853-8801 (facsimile)

Date: 6/14/04